

I claim:

1. An exercise apparatus, comprising in combination:
 - a central mechanical portion;
 - a contact surface;
 - a footrest support member extending from the central mechanical portion

to the flat contact surface;

wherein the footrest support member is mechanically coupled to the central mechanical portion;

wherein the central mechanical portion controls the motive resistance and defines the travel path of the footrest support member; and

wherein the footrest support member rollingly cooperates with the contact surface.

2. The exercise apparatus of claim 1 wherein the contact surface is flat.

3. The exercise apparatus of claim 1 wherein the footrest support member has a proximal end coupled to the central mechanical portion and a distal end; wherein the distal end includes a roller bearing rollingly coupled thereto; wherein the contact surface includes a plurality of intersecting races formed therein; and wherein the races are sized to receive the roller bearing.

4. The exercise apparatus of claim 1 wherein the footrest support member has a proximal end coupled to the central mechanical portion and a distal end; wherein the distal end includes a generally flat contact portion; and wherein the contact surface includes a plurality of roller bearings rollingly coupled thereto.

5. The exercise apparatus of claim 1 wherein the footrest support member further comprises a first portion and a second portion and wherein the first portion and second portion interlockingly connect to define a joint.

6. The exercise apparatus of claim 5 wherein the joint further comprises a plurality of apertures and a pin extending through four apertures.

7. The exercise apparatus of claim 5 wherein the joint further comprises a plurality of recesses formed in the first portion and a protrusion formed on the second portion and wherein the protrusion is interlockingly connectable in a recess.

8. An elliptical exercise machine, comprising in combination:
 - a gearbox;
 - a generally flat contact surface;
 - a first generally linear footrest support member mechanically coupled to the gearbox and extending to the flat contact surface;
 - a second generally linear footrest support member mechanically coupled to the gearbox and extending to the flat contact surface; and
 - an elastic coupler removably connected between the first and second generally linear footrest support member;
 - wherein the contact surface is generally described by a first axis and a second orthogonally oriented axis;
 - wherein the gearbox independently governs the motive resistance and travel path of each footrest support members;
 - wherein the each footrest support member rollingly cooperates with the contact surface;
 - wherein each first and second generally linear footrest support member may cooperate with the support surface independently of the other respective footrest support member; and
 - wherein each footrest support member may cooperate along the first axis and the second axis.

9. The exercise machine of claim 8 wherein the first and second generally linear footrest support members are of variable length.

10. The exercise apparatus of claim 8 wherein each footrest support member has a proximal end coupled to the gearbox and a distal end; wherein the distal end includes a roller bearing rotatably coupled thereto; wherein the contact surface includes a plurality of intersecting races formed therein; and wherein the races are sized to receive the roller bearing.

11. The exercise apparatus of claim 8 wherein each footrest support member has a proximal end coupled to the gearbox and a distal end; wherein the distal end includes a generally flat contact portion; and wherein the contact surface includes an array of roller bearings operationally coupled thereto.

12. The exercise apparatus of claim 8 wherein the contact surface further comprises siderails.

13. An elliptical exercise machine, comprising in combination:

- a generally flat contact surface;
- a first generally linear footrest support member mechanically coupled to the gearbox and extending to the flat contact surface;
- a second generally linear footrest support member mechanically coupled to the gearbox and extending to the flat contact surface;
- means for limiting the motive resistance and travel path of the respective footrest support members; and
- an elastic coupler removably connected between the respective generally linear footrest support member;
- wherein the contact surface is generally described by a first axis and a second orthogonal oriented axis;
- wherein the each footrest support member ~~rollingly~~ cooperates with the contact surface;
- wherein each first and second generally linear footrest support member may cooperate with the support surface independently of the other respective footrest support member; and
- wherein movement of each footrest support member is uncoupled along the first axis along the second orthogonal axis.

14. The exercise machine of claim 13 wherein the first and second generally linear footrest support members are of variable length.

15. The exercise apparatus of claim 13 wherein each footrest support member has a distal end and a proximal coupled to the means for limiting the motive resistance and travel path; wherein the distal end includes a roller bearing rotatably coupled thereto; wherein the contact surface includes a plurality of intersecting races formed therein; and wherein the races are sized to receive the roller bearing.

16. The exercise apparatus of claim 13 wherein each footrest support member has a distal end and a proximal end coupled to the means for limiting the motive resistance and travel path; wherein the distal end includes a generally flat contact portion; and wherein the contact surface includes an array of roller bearings operationally coupled thereto.

17. The exercise apparatus of claim 13 wherein the contact surface further comprises siderails.